Table S1. Differentiated metabolites in breast muscle between line S and line D.

Metabolite name	log2(FC)	p-value	VIP-value
Sm d34:1	-0.8008	0.0001	2.6478
1-Myristoyl-2-stearoyl-sn-glycero-3-phosphocholine	-0.5042	0.0001	2.6263
Ethyl vanillate	-0.6497	0.0002	2.6122
Pc(16:1e/17-hdohe)	-0.3903	0.0002	2.5784
Nocardamine	-0.9716	0.0003	2.5163
Guanosine diphosphate mannose	0.7519	0.0003	2.4935
3,8''-Biapigenin	1.2187	0.0007	2.4345
1,2-Diamino-2-methylpropane	-0.7038	0.0008	2.3853
Juglone	0.5019	0.0010	2.3645
Quinolin-2-ol	0.8474	0.0015	2.3532
Isobutyryl-l-carnitine	1.0875	0.0017	2.3696
Gossypol	0.4249	0.0019	2.3150
(2-Aminoethoxy)[2-[docosa-4.7.10.13.16.19-hexaenoyloxy]-3-[octadeca-1.9-dien-1-yloxy]propoxy]phosphinic acid	-0.7639	0.0020	2.2898
Phenol, 5-(1,1-dimethylheptyl)-2-[(1r,2r,5r)-5-hydroxy-2-(3-hydroxypropyl)cyclohexyl]-	-0.5429	0.0021	2.2493
L-valine	-0.6902	0.0022	2.2538
Glutathione, oxidized	0.6675	0.0025	2.2272
2'-Deoxycytidine 5'-diphosphate	1.0892	0.0025	2.2435
L-lysine	-0.9819	0.0026	2.2481
Flavin adenine dinucleotide (FAD)	0.9953	0.0028	2.2104
N-(2-furoyl)glycine	0.2506	0.0029	2.2379
Gly-His	-0.8674	0.0030	2.2324
Sm d34:2	-0.4962	0.0032	2.2619
Guanidinopropionic acid	0.4303	0.0034	2.2252
2'-O-methylinosine	0.5372	0.0034	2.2013
L-glutathione, reduced	0.7294	0.0036	2.1774
Clomazon	0.5623	0.0038	2.1975
Harpagoside	0.6184	0.0040	2.2020
1-Palmitoyl-2-oleoyl-phosphatidylglycerol	-0.4728	0.0044	2.1760
PC(16:0/16:0)	-0.3610	0.0045	2.1755
2-Phenylpiperidine-2-acetamide	0.4276	0.0048	2.1527
Muramic acid	0.2827	0.0048	2.1291
Pro-his	-0.7239	0.0051	2.1316
Isoproterenol	-0.2577	0.0051	2.1447
Taurochenodeoxycholate	-3.3965	0.0054	2.1350
Tauroursodeoxycholic acid	-2.9129	0.0062	2.1054
His-Gly	-0.6895	0.0064	2.1061
Poncirin	0.4976	0.0065	2.0932

Taurodeoxycholic acid	-2.6473	0.0067	2.0846
Sphingosine	-0.8549	0.0069	2.0749
1-Stearoyl-2-linoleoyl-sn-glycero-3-phospho-l-serine	0.4754	0.0070	2.0600
3,5-Di-tert-butyl-4-hydroxybenzoic acid	-0.2301	0.0071	2.0795
4-Hydroxyisoleucine	0.8614	0.0071	2.1045
Ala-Glu-Arg	-0.4785	0.0074	2.0734
10,12-Tricosadiynoic acid	-2.0325	0.0088	2.0356
4-Piperidinecarboxamide	-0.7280	0.0097	2.0564
Isovaleryl-l-carnitine	1.9586	0.0107	2.0211
Ketoleucine	-0.9372	0.0108	1.9824
Aspartic acid	-0.3802	0.0108	2.0197
Choline	-0.4266	0.0110	1.9540
Licoricesaponin h2	1.2327	0.0113	2.0065
Cer[ns] d34:1	-0.6995	0.0115	2.0022
(2-Aminoethoxy)[2-[docosa-4.7.10.13.16.19-hexaenoyloxy]-3-[hexadec-1-en-1-yloxy]propoxy]phosphinic acid	-0.4820	0.0116	1.9932
L-citrulline	-0.3882	0.0117	2.0263
2-Naphthalenesulfonic acid	0.9751	0.0125	1.9457
1h-Imidazo[4,5-c]pyridine-6-carboxylic acid, 1-[[4-(dimethylamino)-3-methylphenyl]methyl]-5-(2,2-diphenylacetyl)-4,5,6,7-tetrahydro-, (6s)-	-0.7414	0.0126	1.9292
Propanoic acid, 2-[[4-[2-[[(cyclohexylamino)carbonyl](4-cyclohexylbutyl)amino]ethyl]phenyl]thio]-2-methyl-	-1.6134	0.0127	1.9679
Trans-4-(aminomethyl)cyclohexanecarboxylic acid	0.3734	0.0129	1.9178
Zanamivir	-1.8380	0.0133	1.9470
Benzeneheptanol, 3-hydroxy-4-[(1r,3s)-3-hydroxycyclohexyl]-.eta.,.eta.-dimethyl-, rel-	2.7693	0.0135	1.8969
5-Methylcytidine	0.3666	0.0137	1.9711
2-Arachidonoyl-1-palmitoyl-sn-glycero-3-phosphoethanolamine	-0.3308	0.0142	1.9642
Anthranilic acid	-0.7109	0.0143	1.9363
.Gamma.-Glu-Cys	0.7414	0.0144	1.9303
Indolelactic acid	-0.4015	0.0145	1.9131
D-erythro-imidazolylglycerol phosphate	-0.5768	0.0146	1.9486
Cholesteryl sulfate	-0.6023	0.0162	1.9348
Ne-acetyllysine	-0.5992	0.0163	1.8737
Ser-Tyr	0.5433	0.0166	1.8760
Trigonelline	0.7858	0.0167	1.9298
Glutamine	-0.3364	0.0171	1.8715
Pc(18:0e/20-hdohe)	-0.5108	0.0175	1.9010
N-phenylacetyl-l-prolylglycine ethyl ester	-0.7339	0.0183	1.8632
N-(4-piperidinyl) acetamide	-0.7106	0.0186	1.8764
Swietenocoumarin b	-0.6399	0.0188	1.9058

Fusidic acid	-1.5097	0.0200	1.8658
Ser-Gly	-0.9106	0.0202	1.8691
Asiatic acid	-1.5782	0.0203	1.8615
Adenosine 5'-monophosphate	-0.3994	0.0205	1.8766
2'-Hydroxy-3,4,6'-trimethoxychalcone	-0.2218	0.0213	1.8875
N-acetyl-s-geranylgeranyl-l-cysteine	-0.7825	0.0224	1.7827
2-Acetyl-6-[(3-butanoyl-2,4,6-trihydroxy-5-methylphenyl)methyl]-3,5-dihydroxy-4,4-dimethylcyclohexa-2,5-dien-1-one	0.4938	0.0226	1.7875
D-myo-inositol-1,4,5-triphosphate	0.4281	0.0228	1.7933
1h-Indazole-3-carboxamide, n-[(1s)-1-(aminocarbonyl)-2-methylpropyl]-1-(cyclohexylmethyl)-	-0.5247	0.0235	1.7807
S-adenosyl-l-methionine	-0.8833	0.0239	1.7932
4-Hydroxy-l-phenylglycine	-1.0994	0.0240	1.8309
1-Naphthol .beta.-d-glucuronide	0.4101	0.0244	1.7555
N.omega.-propyl-l-arginine	-0.5939	0.0245	1.8179
Zoledronic acid	-0.4086	0.0248	1.8256
Isoginkgetin	0.8549	0.0248	1.7572
N6,N6,N6-Trimethyl-L-lysine	-0.5824	0.0249	1.7883
Crocin	-0.6158	0.0252	1.8374
2s-Amino-4-phosphonobutyric acid	-0.6223	0.0253	1.8072
1-Stearoyl-2-hydroxy-sn-glycero-3-phosphocholine	-0.6847	0.0254	1.7550
1-(1z-Hexadecenyl)-sn-glycero-3-phosphocholine	-0.7752	0.0267	1.7519
Gly-Gly	-0.5953	0.0268	1.7983
Theophylline	0.2439	0.0286	1.7249
Pi 36:4	-0.4135	0.0287	1.7830
3'-O-methylguanosine	0.2749	0.0287	1.7650
1,5-Pentanediamine	-0.4758	0.0289	1.7097
Octyl-3,5-di-tert-butyl-4-hydroxyhydrocinnamate	-1.2912	0.0296	1.6973
2'-O-methylcytidine	0.2126	0.0305	1.7511
Leucine	-0.4522	0.0308	1.6960
1-Stearoyl-rac-glycerol	-0.6734	0.0310	1.7119
Eurycomalactone	-1.6805	0.0311	1.7378
Dihydrothymine	-0.3636	0.0312	1.7306
1-Myristoyl-2-hydroxy-sn-glycero-3-phosphoethanolamine	-0.6447	0.0314	1.7021
Alpha-tocopherol (Vitamin E)	-0.7350	0.0315	1.7255
Desisopropyldisopyramide	0.5117	0.0316	1.7239
3'-O-methylcytidine	0.5583	0.0318	1.7187
1,2-Dithiolane-3-pentanamide, n,n'-1,3-propanediylbis-	-0.4631	0.0319	1.7922
3,4-Dichlorophenol	-0.4548	0.0322	1.7513
Guanosine 5'-diphospho-.alpha.-d-mannose	0.4677	0.0327	1.6795
N-formyl-l-methionine	-0.5811	0.0332	1.7094
Ethylenediaminetetraacetic acid	0.8888	0.0347	1.6955

4,2'-Dihydroxy-3,4',6'-trimethoxychalcone	0.4283	0.0350	1.6763
Arg-Cys	0.3888	0.0355	1.6981
7-Oxocholesterol	1.4103	0.0356	1.7234
1-Palmitoyl lysophosphatidic acid	-0.4317	0.0357	1.6756
Adp-ribose	0.4169	0.0358	1.7170
Gly-Asn	-0.5192	0.0362	1.7061
Octadecanoic acid	-0.2876	0.0363	1.7235
N-acetylserine	-0.4231	0.0364	1.6596
3- Quinolinecarboxylic acid, 1,4,5,6,7,8-hexahydro-4-(3-hydroxyphenyl)-7-(2- methoxyphenyl)-2-methyl-5-oxo-, 2-methoxyethyl ester	-0.5860	0.0368	1.7184
Pentaerythritol tetrakis(3,5-di-tert-butyl-4-hydroxyhydrocinnamate)	-0.4416	0.0375	1.7246
Hypoxanthine	-0.4810	0.0382	1.7033
Pro-Gly-Lys	-0.2598	0.0383	1.6833
L-glutamine	-0.3861	0.0389	1.6984
Threonine	-0.5833	0.0402	1.6441
N-palmitoyl-d-sphingosine	-0.5682	0.0407	1.6982
Dibucaine	0.6345	0.0408	1.6396
Salmeterol	-0.6220	0.0412	1.6426
Acetylcarnitine	0.2791	0.0413	1.6646
Pc(16:0e/10-hdohe)	-0.3876	0.0415	1.6756
Pc(18:1e/14,15-eet)	-0.4852	0.0417	1.6737
Flavone base + 3o, c-pen, c-pen	0.7299	0.0418	1.6172
Goitrin	-0.9789	0.0422	1.6840
Condelphine	-0.5175	0.0423	1.6300
Lisinopril (8r,s)-diketopiperazine	-0.1426	0.0425	1.6850
2,4-Dichlorobenzoic acid	0.4664	0.0426	1.6435
1-(1z-Octadecenyl)-sn-glycero-3-phosphocholine	-0.7650	0.0431	1.5915
Hyodeoxycholic acid	-0.7740	0.0431	1.6749
L-tryptophanamide	1.3548	0.0450	1.6475
N-alpha-acetyl-l-lysine	1.6869	0.0452	1.6683
N-acetyl-d-glucosamine 6-phosphate	-0.6962	0.0458	1.6472
Asn-Trp	-0.2663	0.0461	1.6662
Isopropyl 4-hydroxybenzoate	-0.1503	0.0470	1.6366
sn-Glycerol 3-phosphoethanolamine	-0.4022	0.0473	1.6224
Capric acid	-0.1385	0.0476	1.6406
1-Palmitoyl-2-arachidonoyl-sn-glycero-3-phosphocholine	-0.3993	0.0482	1.6394
Tremulacin	-1.3221	0.0483	1.5925
Pc(16:0e/8-hepe)	-0.3217	0.0491	1.6393

log2(FC), log2(Fold Change); VIP-value, value of variable importance in projection.